Date: Wed, 25 Aug 93 04:30:08 PDT
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V93 #1011
To: Info-Hams

Info-Hams Digest Wed, 25 Aug 93 Volume 93 : Issue 1011

Today's Topics:

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Tue, 24 Aug 1993 22:25:30 GMT
From: telesoft!garym@uunet.uu.net
Subject: 'Diversity Operation'?
To: info-hams@ucsd.edu

In <1204@pig.UUCP> die@pig.UUCP (Dave Emery) writes:
>In article <1993Aug17.015547.26921@bnr.ca> markus@pinetree.org writes:
>   Diversity reception is a technique to take advantage of the fact
>the many kinds of radio fading are due to interference...

>... Some such combiners
>(widely used on VHF/UHF fm repeaters to handle multipath flutter fading
>from mobile users) simply switch to the receiver providing the stronger
>signal at the instant, others combine in proportion to the square of the
>ratio of the signal strengths.

>   It is important to note that the information is combined *after*
>detection.   It is not sufficient to merely connect two antennas together
>or even the IF of two receivers together, because the carrier waves
>present will combine in the same way signals at an antenna do - they
>will interfere with each other and add or cancel depending on relative
>phase. This is equivalent to what happens at the antenna with signals
>from different paths (principle of superposition) and simply produces
>the same kind of fading as seen at the antennas (sometimes worse).

I would like to reduce multipath flutter fading on a mobile VHF FM receiver using diversity but without requiring two receivers. It seems like there might be a way to work this...

How about using two antennas feeding into the receiver with diode switching to allow rapid selection of which antenna feeds the receiver. Then use the AGC signal from the IF to determine when to switch antennas. When the AGC indicates a drop out is happening or the signal is below some set threshold, switch to the other antenna. The maximum switching rate would probably have to be limited (under 100 Hz?) to limit switching when the signal drops out from both antennas and reduce modulation of the receive signal.

While this wouldn't be as good as dual receiver diversity where you could always select the best signal, I would think it would help reduce deep fading and it would be cheap too since you don't have to have two receivers. Does anyone do anything like this?
--GaryM
--
Gary Morris KK6YB   Internet: garym@alsys.com
San Diego, CA USA   Phone: +1 619-457-2700 x128 (work)

Date: 25 Aug 93 07:03:14 GMT
From: news-mail-gateway@ucsd.edu
Subject: 4X1RU REJECT LIST
To: info-hams@ucsd.edu

I undeerstood that Jim, 4X1RU (and other BBS's - SV1ML (?)) were rejecting messages for several reasons.
One, stations were sending bullitens to ALL @WW or ALL @EU in languages other than English. Don't get me wrong, I have nothing against bullitens that are not in English but they have no place on networks where the majority or the readers understand only English as a first or second language. I could also understand a case where a BBS in the U.S. would reject bullitens written only in Spanish and distributed to ALL.
Many people do speak Spanish in the U.S. but most people do not and to distribute it to ALL is just not fair. On the other hand, if Miami, FL. has a large Spanish speaking ham community and a bulliten goes out to that

area, I see nothing wrong with this.
4X1RU also is rejecting stations who dump software on the network.
On long haul HF packet networks at 300 baud, imagine how long it takes to
pass a 300K binary file !
I think Jim should let people know what his rules are so as many Europeans
who use his services know where they stand.
73,
Rich
WB2JBS

Date: Wed, 25 Aug 1993 08:52:33 GMT
From: mcsun!sun4nl!dutrun!dutiws!dejongh@uunet.uu.net
Subject: 4X1RU REJECT LIST
To: info-hams@ucsd.edu

OK, 4X1RU rejects data.

I've had the same experience. I forwarded a (dutch) bulletin to a fellow
HAM. I obtained a mail from 4X1RU stating that my message was incredibly
long..... ca. 30K
grin

I mailed him back why he didn't forward my message anyway and that I'll
take care in the future. Haven't heard from him since.
Between the lines of his mail you could read that he wasn't that happy
with messages he was not able to read.

Why then set up a node? I didn't choose to use his gateway! Can I help it?

BTW (zap), I couldn't uncompress your .Z file. I get the error:
not in compressed format :(

No doubt I'll be on that list too.

Remco, PA3FYM (besten@chem.ruu.nl)

Date: 24 Aug 93 23:30:13 GMT
From: koriel!west.West.Sun.COM!news2me.EBay.Sun.COM!exodus.Eng.Sun.COM!wellworld!
endelman@RUTGERS.EDU
Subject: Antenna impedance measurements
To: info-hams@ucsd.edu

I'd like to experiment a bit with electrically short antennas and I'll need
to measure the antenna's impedance. Traditionally, one does this with an

impedance bridge or noise bridge.

MFJ has a "resistance analyzer" which you tune for a dip, then read the frequency from the tuning dial and the resistance directly from the meter. I kind of like that approach, since it's a one-adjustment deal, rather than the iterative approach used with other bridges.

Has anyone used the MFJ? How are its accuracy and reliability? How do you antenna hackers out there like to do your impedance measurements?

Replies to me directly, please.

Aaron
KK6QH

--
Aaron Endelman KK6QH SPARCworks IBEx Group endelman@eng.sun.com
UMTV12-33, Sun Microsystems, Inc., 2550 Garcia Ave., Mtn. View, CA 94043

Date: Mon, 23 Aug 1993 02:43:42 -0600
From: saimiri.primate.wisc.edu!sdd.hp.com!cs.utexas.edu!oakhill!val!afarm!fredmail@ames.arpa
Subject: FT-530
To: info-hams@ucsd.edu

Hello eric, just curious, you said you removed Jumper 11 and it gave you 23cm (1200MHz) receive?? that's strange... if the pll would lock up in that band, it'd be worth it, there's a few 1.2 gig repeaters in the area. Thanks, 73's.

Date: Tue, 24 Aug 1993 22:02:49 GMT
From: mcsun!sun4nl!relay.philips.nl!philica!geertj@uunet.uu.net
Subject: How to make one (was: SWR Meters)
To: info-hams@ucsd.edu

alanb@sr.hp.com (Alan Bloom) writes:

>"Eleen N. Kamas" (ee2g+@andrew.cmu.edu) wrote:
>:
>: I have a SWR meter that was designed to be used for HF frequencies.
>: Is it possible to modify it to work on 2 meters?
>Try it! I have found that many of the cheap SWR meters work passable
>well on 2 meters as-is. If it reads close to 1:1 into a good 50-ohm load,
>and reads infinity into an open circuit, then it is probably usable.

If the SWR 'engine' isn't usable (in my experience, it usually isn't),
you could try to make a new engine. I did something like:

1. Take a small piece of RG213 (or other, requirements are
   cable as thick as possible; solid dielectricum, woven braid)
2. Gently remove the outer isolation (gently! has to be put back later on)
   Cutting on the length side of the cable gives best results.
3. Push the outer braid in (like a harmonica), so the inner diameter
   raises and the solid inner coax cable can be easily removed;
4. Put two thin, isolated wired wires (e.g. teflon 'wire wrap' wire)
   in parallel to the inner conductor of the coax (the part you took out in
   step 3); the ends of the wire should be accessible later
5. Re-apply the braid you took out in step 3. Make shure that the 4 ends
   of the wire you added remain accessible; peel them trough the braid.
   Make shure that you re-apply the braid as neatly as possible; the
   impedance of the coax is determined by this and thus the accuracy
   of your instrument!
6. Re-apply the outer isolation as neatly as possible. This helps to
   improve your work from step 5. Make provisions for the wires you added.
7. Put the coax between the two connectors of the original SWR casing.
   NEATLY. No pigtails please; make it in a VHF fashion.
   The accuray of your device is determined by the impedance of it;
   the 'modified' coax and the connection to the connectors will disturb
   the impedance of the unit and that should be as less as possible!
8. Hook up the two sense wires as in the original scheme: on the left,
   a trimming pot on wire 1 and a diode detector on wire 2; on the
   right, another diode detector on wire 1 and a trimming pot on
   wire 2 (thus, cross).
   The original unit probably has long wires to a PCB containing these
   components in the original setup; this is no longer possible
   (remember, we're talking VHF). Apply them in such a way that the
   VHF 'hot' sense wires are as short as possible (a few mm's at
   most). The DC wires (the output of the detectors) is, of course,
   much less of a problem.
9. You probably should swap the diodes originally used in the detectors
   for something better. Use low-voltage drop diodes; schottky or such.
   I have used OA91 diodes but they are probably not known in the USA.
   They are low-capacity, high-speed, low-drop detector diodes for
   AM video signals (at worst, you have to take them out of 2 TV
   sets; as an added bonus, the other components are now also available
   for other projects :-)

Then, wire the rest of the SWR meter as you normally do, and adjust
the two puts on the sense wires.

On short, what you have done is added two sense wires to a piece of
coax. That piece of coax has to remain 'coax' as much as possible,
hence my emphasis on _short_ wires. The better the coax is

restored to its iriginal form, the better the meter. (that is why
I advised *thick* coax; the changes have less impact on the
characteristics of this than on thin coax).

This, of course, doesn't make up for a bird meter. It also doesn't
cost nearly as much. I used one in my student years; I only replaced
it a year ago when I needed something for higher frequencies, was too
lazy to build it, and got away with it because I now could afford
to buy one instead :-).

This makes up for a nice weekend project. You probably ruin the first
piece of coax; since only small lengths are involved, that's no problem.

Hope this helps, 73,

Geert Jan, PE1HZG

Date: 25 Aug 1993 12:29:51 +0200
From: mcsun!sun4nl!hacktic!not-for-mail@uunet.uu.net
Subject: Rejecting by 4X1RU packet radio BBS.
To: info-hams@ucsd.edu

To those trying to decode the UUe file. I have compressed it with gzip,
which I thought was unix-compress compatible. Well maybe a wrong parameter
(should have reread the manual though :-( )
Sorry for the inconvenience. Bye.

-martin-

--

"I-Man satta on the mountain top.	Name : Martin Heffels
Watching Babylon burning red hot"	e-mail : zap@hacktic.nl
- War inna Babylon, Max Romeo -	air-mail: PE1EEC@PI8JOP.NLD.EU

Date: Tue, 24 Aug 1993 21:52:54 GMT
From: pipex!sunic!trane.uninett.no!news.eunet.no!nuug!news.eunet.fi!fuug!krk!
krkmoon.krk.fi!lakki@uunet.uu.net
Subject: WANTED! HR-2510 / Uniden 2830 Techical manual
To: info-hams@ucsd.edu

I'm looking for a technical service manual to my PRESIDENT HR-2510.
The radio is also known as President Lincoln and UNIDEN 2830.

If you have the manual, pse e-mail to me and tell would you sell it to
me or xerox it or what.

Thank you in forehand.

/Erik OH2LAK

--
E R I K F I N S K A S   OH2LAK
-----------------------------------   R   A
InterNet: Erik.Finskas@krk.fi   RADIO AMATEUR
                Lakki@krk.fi   D   HAM   A
                Lakki@cute.cute.fi   I   T RADIO
Amateur Packet: OH2LAK@OH2RBJ.FIN.EU   O   E   I
-----------------------------------   U   O
   H   A   M   R   A   D   I   O   R
      T H E R E A L T H I N G

Date: Wed, 25 Aug 93 05:12:39 GMT
From: mentor.cc.purdue.edu!noose.ecn.purdue.edu!en.ecn.purdue.edu!n9ljx@purdue.edu
To: info-hams@ucsd.edu

References <745820220snx@llondel.demon.co.uk>, <25e9od$kfq@k2.San-
Jose.ate.slb.com>, <1993Aug25.024634.20931@mnemosyne.cs.du.edu>pu
Subject : Re: A strange thing that happens when you are learning code

In article <1993Aug25.024634.20931@mnemosyne.cs.du.edu> jmaynard@nyx.cs.du.edu
(Jay Maynard) writes:
>In article <25e9od$kfq@k2.San-Jose.ate.slb.com> jones@San-Jose.ate.slb.com (Clark
Jones) writes:
>>I've sometimes been tempted to honk out "CQ" when I see a car with "ham"
>>license plates... Anybody ever done this?
>
>The horn button makes a lousy key. I find a quick "HI" more effective.

Wouldn't take much to rig a straight key on the dash for this situation. Or
ou could get one of those musical horns and program it for 'CQ CQ CQ DX.' OR
maybe just use an old memory keyer. Sounds like fun!

--scott

--
Scott Stembaugh - N9LJX   internet: n9ljx@ecn.purdue.edu
Operations Supervisor, ADPC   phone: 317 494 7946

Purdue University
West Lafayette, IN 47907-1061

Date: 24 Aug 1993 23:54:53 GMT
From: swrinde!cs.utexas.edu!math.ohio-state.edu!magnus.acs.ohio-state.edu!csn!
news.sinet.slb.com!news.San-Jose.ate.slb.com!jones@network.ucsd.edu
To: info-hams@ucsd.edu

References <24ud34$e44@hpscit.sc.hp.com>, <CC0o14.H8n@westford.ccur.com>,
<745820220snx@llondel.demon.co.uk>.com
Subject : Re: A strange thing that happens when you are learning code

David Hough (dave@llondel.demon.co.uk) wrote:
: Works both ways as well.... try whistling CQ in a crowd and see who twitches
: :-)

: Dave

: **
: * G4WRW @ GB7WRW.#41.GBR.EU AX25   *   Start at the beginning. Go on   *
: * dave@llondel.demon.co.uk Internet *   until the end. Then stop.   *
: * g4wrw@g4wrw.ampr.org   Amprnet *   (the king to the white rabbit) *
: **

I sometimes find it a relief to tap out a message to another driver that
contains words I would _never_ put on the air! Hi hi! (One of these days,
one of them is going to understand what I sent...)

I've sometimes been tempted to honk out "CQ" when I see a car with "ham"
license plates... Anybody ever done this?

--
Disclaimer: The opinions expressed above are mine and not those of Schlumberger
because they are NOT covered by the patent agreement!

Phone: (602) 345-3638   Internet: jones@sj.ate.slb.com
Packet: N7RPQ@K7BUC.AZ.USA.NA   RF: N7RPQ/AA
Snail: Clark Jones, Schlumberger Technologies, 7855 S. River Pkwy #116, Tempe,
       AZ 85284-1825

Date: 25 Aug 1993 00:00:47 GMT
From: swrinde!cs.utexas.edu!math.ohio-state.edu!magnus.acs.ohio-state.edu!csn!
news.sinet.slb.com!news.San-Jose.ate.slb.com!jones@network.ucsd.edu
To: info-hams@ucsd.edu

References <CC0r4s.FCu@cbnewsm.cb.att.com>, <252nkk$3sa@gopher.cs.uofs.edu>,
<1993Aug21.131730.4760@ke4zv.uucp>K
Subject : Re: A strange thing that happens when you are learning code

Gary Coffman (gary@ke4zv.uucp) wrote:

: So if you want to do Morse's code the way he did, you have to send and
: receive it by mechanical means, not with a key and ear. Morse would
: have been delighted by the ticker tape machines that came along later,
: or by the telex machine, since that's essentially what he was trying
: to invent.

Gee, that would sure make the 20 WPM test a _lot_ easier! I like the idea
of doing it "the original way"!

--
Disclaimer: The opinions expressed above are mine and not those of Schlumberger
because they are NOT covered by the patent agreement!

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End of Info-Hams Digest V93 #1011
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